State of Wisconsin
Department of Natural Resources

STACK IDENTIFICATION
AIR POLLUTION CONTROL PERMIT APPLICATION
Form 4530-103 11-93 Information attached? __ (y/n)

SEE INSTRUCTIONS ON REVERSE SIDE

1. Facility name:	2. Facility identification number:	3. Stack identification number:

4. Exhausting Unit(s), use Unit identification number from appropriate Form(s) 4530-104, 106, 107, 108 and/or 109

4530-104___ 4530-106___ 4530-107___ 4530-108___ 4530-109___

5. Identify this stack on the plot plan required on Form 4530-101

6. Indicate by checking:

☐ This stack has an actual exhaust point. ☐ This stack serves to identify fugitive emissions.

If this stack has an actual exhaust point, then provide the following stack parameters

7. Discharge height above ground level: ____ (feet)

8. Inside dimensions at outlet (check one and complete):

☐ Circular ____ (feet) ☐ rectangular ____ length (feet) ____ width (feet)

9. Exhaust flow rate:

Normal _____ (ACFM) Maximum _____ (ACFM)

10. Exhaust gas temperature (normal): ____ (°F)

11. Exhaust gas moisture content: Normal ____ volume percent Maximum ____ volume percent

12. Exhaust gas discharge direction: ☐ Up ☐ Down ☐ Horizontal

13. Is this stack equipped with a rainhat or any obstruction to the free flow of the exhaust gases from the stack? ☐ Yes ☐ No

***** Complete the appropriate Air Permit Application Forms(s) 4530-104, 106, 107, 108 or 109 for each Unit ***** exhausting through this stack.

State of Wisconsin
Department of Natural Resources

BOILER OR FURNACE OPERATION
AIR POLLUTION CONTROL PERMIT APPLICATION
Form 4530-104 11-93 Information attached? __ (y/n)

SEE INSTRUCTIONS ON REVERSE SIDE

1. Facility name:	2. Facility identification number:
3. Stack identification number:	4. Boiler/furnace number:

4a. Unit description:

5. Indicate the boiler/furnace control technology status. ☐ Uncontrolled ☐ Controlled

If the boiler/furnace is controlled, enter the control device number(s) from the appropriate forms:

4530-110 ____ 4530-111 ____ 4530-112 ____ 4530-113 ____
4530-114 ____ 4530-115 ____ 4530-116 ____ 4530-117 ____

6. Furnace type:	7. Maximum continuous rating: mmBTU/hr
8. Manufacturer:	9. Model number:

10. Date of construction or last modification:

11. Fuels and firing conditions:

	Primary fuel	Backup fuel #1	Backup fuel #2	Backup fuel #3
Fuel name				
Higher heating value				
Maximum sulfur content (Wt.%)				
Maximum ash content (Wt.%)				
Excess Combustion Air (%O_2)				
Moisture content (as fired) (%)				
Maximum hourly consumption				
Actual yearly consumption				

***** For this emissions unit, identify the method of compliance demonstration by completing Form 4530-118, ***** DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE. Attach Form 4530-118 and its attachment(s) to this form. This is not a requirement of non-Part 70 sources.

***** Please complete the Air Pollution Control Permit Application Forms 4530-126 and 4530-128 for this Unit. *****

State of Wisconsin
Department of Natural Resources

STORAGE TANKS
AIR POLLUTION CONTROL PERMIT APPLICATION
Form 4530-105 11-93 Information attached? __ (y/n)

SEE ATTACHED SHEET FOR INSTRUCTIONS

1.Facility Name | 2.Facility Identification Number | 3.Storage Tank Number

4.Control Device Number (use number from appropriate Form(s) 4530-110, 111, 112, 113, 114, 115, 116, or 117) | 5.Storage Tank Capacity gallons | 6.Date of Installation or Last Modification

7.Tank Height feet | 8.Tank Diameter feet | 9.Color of Tank (check one) __ White __ Other_____ __ Underground

10.Is this tank equipped with a submerged fill pipe?
__ Yes __ No

11.Is this tank equipped with a pressure/vacuum conservation vent?
__ Yes __ No
If yes; at what pressure is it set? _____(psia)
at what vacuum is it set? _____(psia)

12.Type of Storage Tank (check one)
__ Open Top Tank __ Fixed Roof __ Fixed Roof w/Internal Floating Roof __ Other (specify)
__ Pressurized Tank __ External Floating Roof __ Variable Vapor Space _____

13.For all Fixed Roof Tanks:

a.Tank Configuration (check one): __ Vertical (upright cylinder) __ Horizontal

b.Tank Roof Type (check one): (required if vertical was selected)
__ Cone Roof - Indicate tank roof height _____(feet)
__ Dome Roof - Indicate tank roof height _____(feet) - Indicate tank shell radius _____(feet)

14.For all Floating Roof Tanks (both internal and external) - Shell Condition (check one):
__ Light Rust __ Dense Rust __Gunite Lined

15.For External Floating Roof Tanks:

a.Tank Construction (check one): __ Welded Tank __ Riveted Tank

b.Average Wind Speed at Tank Site: _____(mph)

c.Rim Seal System Description (check one):
__ Shoe Mounted Primary
__ Shoe Primary, Rim Secondary
__ Shoe Primary, Shoe Secondary
__ Vapor Mounted Primary
__ Vapor Primary, Rim Secondary
__ Vapor Primary w/Weather Shield
__ Liquid Mounted Primary
__ Liquid Primary, Rim Secondary
__ Liquid Primary w/Weather Shield

d.Roof Type (check one): __ Pontoon Roof __ Double Deck Roof

e.Roof Fitting Types (indicate the number of each type):

Access Hatch (24" diameter well)
____ Bolted cover, gasketed
____ Unbolted cover, ungasketed
____ Unbolted cover, gasketed

Unslotted guide-pole well (8" diameter unslotted pole, 21" diameter well)
____ Ungasketed sliding cover
____ Gasketed sliding cover

Gauge-float well (20" diameter)
____ Unbolted cover, ungasketed
____ Unbolted cover, gasketed
____ Bolted cover, gasketed

Gauge-Hatch/sample well (8" diameter)
____ Weighted mechanical actuation, gasketed
____ Weighted mechanical actuation, ungasketed

Vacuum Breaker (10" diameter well)
____ Weighted mechanical actuation, gasketed
____ Weighted mechanical actuation, ungasketed

Roof Drain (3-inch diameter)
____ Open
____ 90% closed

Slotted guide-pole/sample well (8" diameter diameter slotted pole, 21" diameter well)
____ Ungasketed sliding cover, without float
____ Ungasketed sliding cover, with float
____ Gasketed sliding cover, without float
____ Gasketed sliding cover, with float

Roof leg (3" diameter)
____ Adjustable, pontoon area
____ Adjustable, center area
____ Adjustable, double-deck roofs
____ Fixed

Roof leg(2-1/2" diameter)
____ Adjustable, pontoon area
____ Adjustable, center area
____ Adjustable, double deck roofs
____ Fixed

Continued on following page

16.For Internal Floating Roof Tanks:

a.Rim Seal System Description (check one): __ Vapor Mounted Primary __ Vapor Mounted Primary plus Secondary Seal
__ Liquid Mounted Primary __ Liquid Mounted Primary plus Secondary Seal

b.Number of Columns: _____

c.Effective Column Diameter: _____ (feet)

d.Deck Type (check one): __ Welded __ Bolted

e.Total Deck Seam Length: _____ (feet)

f.Deck Area: _____ (square feet)

g.Deck Fitting Types (indicate the number of each type):

Access Hatch (24" diameter)
____ Bolted cover, gasketed
____ Unbolted cover, gasketed
____ Unbolted cover, ungasketed

Automatic gauge float well
____ Bolted cover, gasketed
____ Unbolted cover, gasketed
____ Unbolted cover, ungasketed

Ladder Well (36" diameter)
____ Sliding cover, gasketed
____ Sliding cover, ungasketed

Column Well (24" diameter)
____ Builtup column-sliding cover, gasketed
____ Builtup column-sliding cover, ungasketed
____ Pipe column-flexible fabric sleeve seal
____ Pipe column-sliding cover, gasketed
____ Pipe column-sliding cover, ungasketed

Sample pipe or well (24" diameter)
____ Slotted pipe-sliding cover, gasketed
____ Slotted pipe-sliding cover, ungasketed
____ Sample well-slit fabric seal 10% open area
____ Stub drain (1" diameter)

Roof leg or hanger well
____ Adjustable
____ Fixed

Vacuum breaker (10" diameter)
____ Weighted mechanical actuation, gasketed
____ Weighted mechanical actuation, ungasketed

17.For Variable Vapor Space Tanks:
Volume Expansion Capacity _____ (gallons)

18.Complete the following table for materials to be stored in this tank:

Material Stored	Annual Throughput (gal/yr)	Daily Average Amount Stored (gallons)	Material Molecular Weight (lb/lb-mole)	Material Vapor Pressure (psia)	Storage Pressure (psia)	Average Storage Temperature (°F)	Material Liquid Density (lb/gal)

19.Maximum Liquid Loading Rate of Tank:
_____ (gallons)

20.Can this tank be loaded at the same time other tanks are loaded? __ Yes __ No

If yes, indicate which other tanks can be loaded at the same time:_____

21.Describe the operations this tank will serve:

State of Wisconsin
Department of Natural Resources

INCINERATION
AIR POLLUTION CONTROL PERMIT APPLICATION
Form 4530-106 11-93 Information attached? __ (y/n)

SEE INSTRUCTIONS ON REVERSE SIDE

1. Facility name:	2. Facility identification number:
3. Stack identification number:	4. Incinerator number:

4a. Unit description:

5. Indicate the incinerator control technology status. ☐ Uncontrolled ☐ Controlled

If the incinerator is controlled, enter the control device number(s) from the appropriate form(s):

4530-110 ____ 4530-111 ____ 4530-112 ____ 4530-113 ____
4530-114 ____ 4530-115 ____ 4530-116 ____ 4530-117 ____

6. Incinerator type

☐ Single chamber ☐ Multiple chamber ☐ Controlled air ☐ Fixed hearth ☐ Stepped hearth ☐ Rotorary kiln
☐ Other (specify)

7. Date of construction or last modification:

8. Normal operating schedule ____ hrs./day ____ days/wk. ____ days/yr.

9. Maximum operating schedule ____ hrs./day ____ days/wk. ____ days/yr.

10. Describe all materials to be burned in this unit.

Material to be burned	Origin	Weight percentage	Heating value

11. Type of incinerator charging ☐ Batch feed ☐ Continuous feed

Waste charging method ____ Maximum Charging rate ____ lbs./hr

12. Combustion information	Design Temperature (°F)	Size (million BTU/hour)	Burner fuels
Primary chamber			
Secondary chamber			

13. Residence time of gas in the secondary chamber _____

14. Is this incinerator equipped with a heat recovery system? ☐ Yes ☐ No
If yes, what is the projected energy production rate? (e.g., lbs steam/hr) ____

15. Is this incinerator equipped with an emergency dump stack? ☐ Yes ☐ No

16. Include as attachments to this form the following information: Attached?

a. Calculations that show how the residence time of the exhaust gas in the secondary chamber was derived. ____
b. The energy and mass balance calculations for each waste. ____
c. A malfunction prevention and abatement plan. ____
d. Describe the start-up and shut down procedures, including their frequency. ____

***** For this emissions unit, identify the method of compliance demonstration by completing Form 4530-118, DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE. Attach Form 4530-118 and its attachment(s) to this form. This is not a requirement of non-Part 70 sources. *****

***** Please complete the Air Pollution Control Permit Application Forms 4530-126 and 4530-128 for this Unit. *****

State of Wisconsin
Department of Natural Resources

PRINTING OPERATIONS
AIR POLLUTION CONTROL PERMIT APPLICATION
Form 4530-107 11-93 Information attached? __ (y/n)

SEE INSTRUCTIONS ON REVERSE SIDE

1. Facility name:
2. Facility identification number:
3. Stack identification number:
4. Process number:

4a. Unit description:

5. Indicate the control technology status. ☐ Uncontrolled ☐ Controlled

If the process is controlled, enter the control device number(s) from the appropriate form(s):

4530-110 ____ 4530-111 ____ 4530-112 ____ 4530-113 ____
4530-114 ____ 4530-115 ____ 4530-116 ____ 4530-117 ____

6. Operation type: ☐ Flexographic ☐ Web-offset ☐ Web-offset (non-heatset) ☐ Packaging Rotogravure ☐ Publication Rotogravure ☐ Screen printing ☐ Other (specify) _____

7. Date of construction or last modification:

8. Normal operating schedule: ____ hrs./day ____ days/wk. ____ days/yr.

9. Oven curing (complete if applicable):
Number of ovens _____ Specify oven fuels _____
Total maximum energy input to each oven: _____ _____

10. Describe all of the inks' and solvents' composition (as applied) that are used by this unit.

Name of ink a.	Maximum usage b.		Normal usage c.	Solids % d.		VOC % e.		Water % f.		Coating or VOC Density g.	Pounds VOC/ gallon less H_2O h.
	gal/hr	gal/yr	gal/yr	W	V	W	V	W	V	lbs/gal	
Total Inks											
List the thinning solvents used with the inks identified above.											
Clean-up solvents											
Clean-up solvents											
Other (specify)											

***** For this emissions unit, identify the method of compliance demonstration by completing Form 4530-118, ***** DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE. Attach Form 4530-118 and its attachment(s) to this form. This is not a requirement of non-Part 70 sources.

***** Please complete the Air Pollution Control Permit Application Forms 4530-126 and 4530-128 for this Unit. *****

State of Wisconsin
Department of Natural Resources

PAINTING AND COATING OPERATIONS
AIR POLLUTION CONTROL PERMIT APPLICATION
Form 4530-108 11-93 Information attached? __ (y/n)

SEE INSTRUCTIONS ON REVERSE SIDE

1. Facility name:
2. Facility identification number:
3. Stack identification number:
4. Process number:

4a. Unit description:

5. Indicate the control technology status. ☐ Uncontrolled ☐ Controlled

If the process is controlled, enter the control device number(s) from the appropriate form(s):

4530-110 ____ 4530-111 ____ 4530-112 ____ 4530-113 ____
4530-114 ____ 4530-115 ____ 4530-116 ____ 4530-117 ____

6. Application technique and transfer efficiency (%):
7. Date of construction or last modification:
8. Normal operating schedule: ____ hrs/day ____ days/wk ____ days/yr
9. Oven curing (complete if applicable):
Number of ovens _____ Specify oven fuels _____
Total Maximum Energy input to each oven: _____ _____

10. Describe all of the coatings' and solvents' composition (as applied) that are used by this unit.

Name of coating a.	ct cg b.	T c.	Maximum usage d.		Normal usage e.	Solids % f.		VOC % g.		Water % h.		Coating or VOC Density i.	Pounds VOC/ gallon less H_2O j.
			gal/hr	gal/yr	gal/yr	W	V	W	V	W	V	lbs/gal	
Total coatings													
List the thinning solvents used with the coatings identified above.													
Clean-up solvents													
Clean-up solvents													
Other (specify)													

***** For this emissions unit, identify the method of compliance demonstration by completing Form 4530-118, ***** DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE. Attach Form 4530-118 and its attachment(s) to this form. This is not a requirement of non-Part 70 sources.

***** Please complete the Air Pollution Control Permit Application Forms 4530-126 and 4530-128 for this Unit. *****

Coating categories (ct. cg. - column b. above) should be entered as follows: 1 - for air dried coatings; 2 - for clear coatings; 3 - for cured coatings; 4 - for extreme performance coatings; 5 - for other (specify) _____

State of Wisconsin
Department of Natural Resources

MISCELLANEOUS PROCESSES
AIR POLLUTION CONTROL PERMIT APPLICATION
Form 4530-109 11-93 Information attached? _ (y/n)

SEE INSTRUCTIONS ON REVERSE SIDE

1. Facility name:
2. Facility identification number:
3. Stack identification number:
4. Process number:
4a. Unit description:
5. Indicate the control technology status. ☐ Uncontrolled ☐ Controlled

If the process is controlled, enter the control device number(s) from the appropriate form(s):

4530-110 ____ 4530-111 ____ 4530-112 ____ 4530-113 ____
4530-114 ____ 4530-115 ____ 4530-116 ____ 4530-117 ____

6. Source Classification Code (SCC):
7. Date of construction or last modification:
8. Normal operating schedule: ____ hrs./day ____ days/wk. ____ days/yr.
9. Describe this process (please attach a flow diagram of the process). Attached?

10. List the types and amounts of raw materials used in this process:

Material	Storage/material handling process	Average usage	Units	Maximum usage	Units
Clean-up solvents					
Other (specify)					

11. List the types and amounts of finished products:

Material	Storage/material handling process	Average amount produced	Units	Maximum amount produced	Units

12. Process fuel usage:

Type of fuel	Maximum heat input to process million BTU/hr.	Average usage	Units	Maximum usage	Units

13. Describe any fugitive emissions associated with this process, such as outdoor storage piles, unpaved roads, open conveyors, etc.: Attached?

***** For this emissions unit, identify the method(s) of compliance demonstration by completing Form 4530-118, ***** DESCRIPTION OF METHODS USED FOR DETERMINING COMPLIANCE. Attach Form 4530-118 and its attachment(s) to this form. This is not a requirement of non-Part 70 sources.

***** Please complete the Air Pollution Control Permit Application Forms 4530-126 and 4530-128 for this Unit. *****

STACK IDENTIFICATION -- Form 4530-103

AIR POLLUTION CONTROL PERMIT APPLICATION INSTRUCTIONS

NOTE: Use of this form is required by the Department for any air pollution control permit application filed pursuant to ss. 285.61, 285.62 or 285.66, Wis. Stats. Completion of this form is mandatory. The Department will not consider or act upon your application unless you complete and submit this application form. It is not the Department's intention to use any personally identifiable information from this form for any other purpose.

One form must be completed for each stack (or release point such as roof vent, wall vent, etc.).

Item 1 Provide the facility name.

Item 2 Provide the facility identification (FID) number that appears on the annual emissions inventory reports.

Item 3 Assign a three-character identification number for this stack (e.g., S01). Use the existing identification number from the Air Emissions Inventory.

Item 4 List the identification(s) for the emissions unit(s) that will vent through this stack. Use the existing identification number(s) from the Air Emissions Inventory. Use this number on the appropriate forms 4530-104, -106, -107, -108 or -109 for the unit(s). Examples: Boiler No. 1 can be "B01," Process No. 3 can be "P03" (see instruction booklet for details).

Item 5 Identify this stack or release point on the required plot plan.

Item 6 An "actual exhaust point" is a real stack that may be described by the physical parameters listed in items 7 through 13 of this form. "Fugitive emissions" means emissions from any emissions point within a facility (the buildings plus the grounds) other than a flue or stack. If you check "this stack serves to identify fugitive emissions," you do not need to complete the rest of the form.

In some cases the current emissions inventory (EI) groups several actual stacks into one fictitious stack, or several fugitive emission points are grouped into a single fictitious stack for accounting purposes. In such a situation, please retain the existing stack grouping from the EI for the purpose of completing your permit application and explain this on an attachment (Form 4530-135 may be used for this purpose).

Where groupings don't already exist, you may wish to combine several actual stacks into one fictitious stack. This would allow you to assign all of the emissions from a particular process line having several stacks, such as a manufacturing line involving painting, to a single stack. IF YOU DECIDE TO GROUP STACKS IN A WAY OTHER THAN THE WAY THEY ARE GROUPED ON YOUR EMISSIONS INVENTORY, PLEASE ATTACH FORM 4530-135, SUPPLEMENTAL INFORMATION, TO EXPLAIN THE REVISED STACK GROUPING. IN THIS WAY THE DEPARTMENT WILL BE ABLE TO RECONCILE THE APPLICATION AND THE EMISSIONS INVENTORY FOR YOUR PLANT.

Item 7 Provide the height (in feet) at which the stack discharges above ground level.

Item 8 Check appropriate shape of the stack. For circular shapes provide the diameter (in feet), and for rectangular shapes provide the length (L) and width (W) (in feet).

Item 9 Provide the normal exhaust flow rate in units of actual cubic feet per minute (ACFM) and the maximum exhaust flow rate expected (in ACFM).

Item 10 Provide the normal exhaust gas temperature (in ^{o}F).

Item 11 Provide the normal and maximum moisture content.

Item 12 Check appropriate discharge direction. If the direction of discharge is at an angle, check the nearest direction.

Item 13 Check the appropriate box.

***** For each emissions unit that vents through this stack, complete and attach the appropriate form(s) 4530-104 through -109. After doing so, start your second stack form, if you have additional stacks, and its associated emissions unit(s), control equipment, and compliance demonstration form(s).

BOILER OR FURNACE OPERATION -- Form 4530-104
AIR POLLUTION CONTROL PERMIT APPLICATION INSTRUCTIONS

NOTE: Use of this form is required by the Department for any air pollution control permit application filed pursuant to ss. 285.61, 285.62 or 285.66, Wis. Stats. Completion of this form is mandatory. The Department will not consider or act upon your application unless you complete and submit this application form. It is not the Department's intention to use any personally identifiable information from this form for any other purpose.

Complete one form for each boiler or furnace with significant emissions.

Item 1 Provide the name of the facility.

Item 2 Provide the facility identification (FID) number that appears on the annual emission inventory reports.

Item 3 Provide the identification number for the stack exhausting this boiler or furnace. Use the same number used on form 4530-103.

Item 4 Assign an identification number to this boiler or furnace (e.g., B21). Use the existing identification number from the Air Emissions Inventory. Use this number on other forms related to this unit.

Item 4a Provide a brief description of this unit.

Item 5 If this boiler or furnace is controlled, assign a control device number (e.g., C30) to the air pollution control device associated with it. Use this number on the appropriate form(s) 4530-110 through -117.

Item 6 State the type of furnace in terms of the firing configuration (e.g., cyclone, spreader stoker, fluidized bed, etc.).

Item 7 The maximum continuous rating of the furnace refers to the furnace's ability to sustain a maximum heat input for three hours. Provide the rating (in million BTU per hour).

Item 8 Provide the boiler or furnace manufacturer. If it is unknown, write "unknown".

Item 9 Provide the boiler or furnace model number. If it is unknown, write "unknown".

Item 10 Record the date of installation or last modification of the emissions unit. Provide the month and date if possible. Write in "00" if unknown (e.g., 00/00/56). Indicate if this is a new source.

Item 11 Complete the table for all fuels presently used with this boiler or furnace, plus all fuels desired for use in alternative operating scenarios that don't require physical changes to the boiler to accommodate the fuels. In other words, identify those fuels presently fired in the boiler (primary and backup fuels) as well as fuels of future interest that could be burned without modifying the boiler. (If someone presently operates a gas-only boiler and wants the capability to burn heavy oil in the future, that person would need to first receive a permit to modify from the Department because a physical change to the boiler - adding a fuel oil burner - would be required to accommodate the heavy oil. A permit to modify would require a separate application from the operation permit application.)

Please attach Form 4530-135 to characterize the fuels in the table as either "present" fuels or fuels to be allowed under alternative operating scenarios. The fuel data provided in this table will form the basis of any permit conditions necessary to ensure compliance with emission limits and ambient air quality standards. You may specify parameter ranges. The stated upper limit should be equal to the expected maximum value. Specify the units (e.g., lbs/hr, BTU/lb, gal/yr, etc.) along with the numerical values for each fuel parameter.

Note: For "excess combustion air", provide the percent oxygen (O_2) in the flue gas, if known, typically observed during the firing of each fuel listed in the table. If flue gas O_2 is not known, provide the furnace excess air as the percent above stoichiometric (i.e., 20 percent excess air is equivalent to 120 percent theoretical air, where "theoretical air" means the amount of combustion air exactly sufficient to completely combust the fuel in perfect (i.e., theoretical) combustion conditions. For natural gas combustion, 5 - 10 percent excess air is typical, and for stoker coal combustion, 30 - 50 percent excess air is a typical range.

STORAGE TANKS -- Form 4530-105
AIR POLLUTION CONTROL PERMIT APPLICATION INSTRUCTIONS

NOTE: Use of this form is required by the Department for any air pollution control permit application filed pursuant to ss. 285.61, 285.62 or 285.66, Wis. Stats. Completion of this form is mandatory. The Department will not consider or act upon your application unless you complete and submit this application form. It is not the Department's intention to use any personally identifiable information from this form for any other purpose.

Complete one form for each significant storage tank.

Item 1 Provide the name of the facility.

Item 2 Provide the facility identification (FID) number that appears on the annual emission inventory reports.

Item 3 Assign an identification number to this storage tank (e.g., T21). Use the existing identification number from the Air Emissions Inventory. Use this number on other forms related to this unit.

Item 4 If the storage tank is controlled, assign a control device number (e.g., C30) to the air pollution control device associated with it. Use this number on the appropriate form(s) 4530-110 through -117.

Item 5 Enter the storage tank capacity (in gallons).

Item 6 Record the date of installation or last modification of the emissions unit. Provide the month and date if possible. Write in "00" if unknown (e.g., 00/00/56). Indicate if this is a new source.

Item 7 Provide the tank shell height (in feet).

Item 8 Provide the tank diameter (in feet).

Item 9 Check the appropriate space. If you select "other," enter the color.

Item 10 A submerged fill pipe is any pipe with a discharge opening that is entirely submerged when the liquid level is six inches (15.2 centimeters) above the tank bottom.

Item 11 Check the appropriate space. If you select "yes," enter the pressure and vacuum (in psia).

Item 12 Check the appropriate tank type. See instruction booklet for details.

Item 13 Answer only if you have a fixed roof. Check the appropriate spaces and provide information. To calculate the tank roof height of a cone roof tank, use the following equation. If you don't know the slope, use the standard value of 0.0625 ft/ft.

Tank roof height (in feet) = slope of cone roof (in ft/ft) x tank shell radius (in feet)

To calculate the tank roof height of a dome roof tank, use the following equation:

$$H_R = R_R - (R_R^2 - R_S^2)^{0.5}$$

Where: H_R = the tank roof height (in feet), R_R = the tank dome roof radius (in feet), and R_S = the tank shell radius (in feet).

Item 14 Answer only if you have an internal or external floating roof tank. Check the shell condition.

Item 15 Answer only if you have an external floating roof tank.

a. Check the appropriate tank construction.

b. List the average wind speed at the tank site. The average wind speed in Green Bay is 10.0 mph, in La Crosse is 8.8 mph, in Madison is 9.9 mph, and in Milwaukee is 11.6 mph. If you don't know the average wind speed, choose the wind speed for the city located closest to the tank site.

c. Check the appropriate rim seal type.

d. Check the appropriate roof type.

e. Indicate the total number of each appropriate roof fitting type in the space provided.

Item 16 Answer only if you have an internal floating roof tank.

a. Check the appropriate rim seal type.

b. Indicate the number of fixed roof support columns. Enter "0" if the fixed roof is self supported.

c. Indicate the effective column diameter (in feet). If you have a 9-inch by 7-inch built-up column, enter 1.1 feet. If you have an 8-inch diameter pipe column, enter 0.7 feet. If you have a dimension other than these standards, use the equation [column perimeter (in feet)/3.14]. If you don't know the dimensions, use 1.0 feet.

d. Check the appropriate deck type.

e. Indicate the total deck seam length.

f. Indicate the deck area.

g. Indicate the total number of each appropriate deck fitting type in the space provided.

Item 17 Answer only if you have a variable vapor space tank. Indicate the volume expansion capacity of the variable vapor space achieved by roof lifting or diaphragm flexing.

Item 18 Complete this table for all materials that are stored in this tank. Vapor pressures should be given as real vapor pressures at the tank conditions given. Do not supply Reid vapor pressures.

Item 19 Indicate the maximum gallons of liquid that can be fed to the tank in one hour. If the tank is being loaded from tank trucks or railcars, and more than one truck or railcar can be unloaded in one hour, take into account the time it takes to unhook one truck or railcar and hook up another.

Item 20 Indicate whether other tanks can be loaded at the same time, and if so, which ones.

Item 21 Describe the operations that this tank will serve. Also indicate here if this tank will serve operations at: a bulk terminal which receives gasoline from refineries, a bulk gasoline plant which receives gasoline from bulk gasoline terminals for subsequent distribution to dispensing facilities, or a pharmaceutical manufacturing facility.

INCINERATION -- Form 4530-106

AIR POLLUTION CONTROL PERMIT APPLICATION INSTRUCTIONS

NOTE: Use of this form is required by the Department for any air pollution control permit application filed pursuant to ss. 285.61, 285.62 or 285.66, Wis. Stats. Completion of this form is mandatory. The Department will not consider or act upon your application unless you complete and submit this application form. It is not the Department's intention to use any personally identifiable information from this form for any other purpose.

Complete one form for each incinerator used to burn waste materials.

Item 1 Provide the name of the facility.

Item 2 Provide the facility identification (FID) number that appears on the annual emission inventory reports.

Item 3 Provide the identification number for the stack exhausting this incinerator. Use the same number used on form 4530-103.

Item 4 Assign an identification number to this incinerator (e.g., I21). Use the existing identification number from the Air Emissions Inventory. Use this number on other forms related to this operation.

Item 4a Give a brief description of the incinerator, including the manufacturer name and model number.

Item 5 If the incinerator is controlled, assign a control device number (e.g., C30) to the air pollution control device associated with it. Use this number on the appropriate form(s) 4530-110 through -117.

Item 6 Check the appropriate incinerator type. If not one of the six listed, check "other" and specify the type.

Item 7 Record the date of installation or last modification of the emissions unit. Provide the month and date if possible. Write in "00" if unknown (e.g., 00/00/56). Indicate if this is a new source.

Item 8 Fill in the normal operating schedule.

Item 9 Fill in the maximum operating schedule.

Item 10 List specifically the types of materials to be incinerated (e.g., paper, cardboard, wood boxes, rags, restaurant animal and vegetable wastes, human and animal remains, industrial by-product liquid, semi-liquid or solid wastes, etc.). Identify the source or type of operation from which the wastes originate. For hazardous waste or wastes with complex chemical composition, provide chemical analysis.

Item 11 Indicate whether the incinerator is batch or continuous feed. Provide the design maximum charging rate. Examples are hand-fired, ram-fed, overhead grapple bucket to charging hopper, etc. Provide the method by which wastes are charged.

Item 12 Provide the design primary and secondary combustion chamber temperatures, the maximum heat input (size) to each chamber in million BTU per hour, and list the fuels used by each burner (e.g., natural gas, No. 2 fuel oil, liquid propane, etc.). Include backup fuels. If your incinerator has only one combustion chamber, write "NA" or " - " in the data fields for secondary chamber.

Item 13 Enter the residence time of gas in the secondary chamber. If your incinerator has only one combustion chamber, interpret this item to refer to that single chamber.

Item 14 Check the appropriate box. If yes, fill in the projected energy production rate.

Item 15 If the incinerator has an emergency dump stack, attach documentation of the authority to use it. Since an emergency dump stack may only be used under specific circumstances (as approved in a permit, plan approval, or order issued by the Department), please briefly describe the authority you have to operate the dump stack. Form 4530-135 may be used for this purpose.

Item 16 Describe the start-up and shut-down procedures, including the frequency, time required, auxiliary burner usage, etc. Section NR 439.11, Wis. Adm. Code, describes the content of malfunction prevention and abatement plans.

PRINTING OPERATIONS -- Form 4530-107
AIR POLLUTION CONTROL PERMIT APPLICATION INSTRUCTIONS

NOTE: Use of this form is required by the Department for any air pollution control permit application filed pursuant to ss. 285.61, 285.62 or 285.66, Wis. Stats. Completion of this form is mandatory. The Department will not consider or act upon your application unless you complete and submit this application form. It is not the Department's intention to use any personally identifiable information from this form for any other purpose.

Complete one form for each significant printing operation.

Item 1 Provide the name of the facility.

Item 2 Provide the facility identification (FID) number that appears on the annual emission inventory reports.

Item 3 Provide the identification number for the stack exhausting this printing operation. Use the same number used on Form 4530-103. The same stack identification number should appear on all appropriate forms used in conjunction with this operation. If there is more than one stack exhausting this unit, please attach Form 4530-135 (Supplemental Information) to further describe the situation.

Item 4 Assign an identification number to this printing operation (e.g., Process P30). Use the existing identification number from the Air Emissions Inventory. Use this number on other forms related to this operation.

Item 4a Provide the manufacturer's name and equipment's model number for this printing operation. Specify dryer manufacturer and model, and specify the type of substrate to be printed. In addition, specify the maximum process weight rates for this operation in pounds per hour. Maximum process weight rate is the maximum weight of inks and substrate introduced to this operation in pounds per hour.

Item 5 Specify the type of control device used to reduce emissions from this operation. If the operation is uncontrolled, check "uncontrolled". For controlled operations, provide an identification number (e.g., C10, C20, etc.) for the control device. This assigned control device number should also be used on the appropriate Form (s) 4530-110, 111, 112, 113, 114, 115, 116, or 117.

Item 6 Specify printing methods (e.g., flexographic, web-offset, packaging rotogravure, etc.). If not one of the six listed, check "other" and specify the type.

Item 7 Provide the installation date (month/day/year) or date of last modification, whichever is later, for this equipment. Please see instruction booklet for the definition of "modification". If this is a new source, indicate that it is new.

Item 8 Specify normal operating schedule in hours per day, days per week, and days per year.

Item 9 Describe any oven curing for this printing operation. Specify dryer fuels and dryer maximum heat input in million BTU per hour; also specify the number of ovens directly associated with this process line.

Item 10a Include all inks, fountain solutions, blanket washes (manual or automatic), clean-up and other solvents used in this operation or projected for use in the future under alternative operating scenarios. Please do not forget to complete and attach Form(s) 4530-126, one for <u>each</u> material that emits hazardous air pollutants, for this printing operation. Printing operations that use large numbers of materials that emit hazardous air pollutants may submit a summary of hazardous emissions, as described in the instructions for Item 5 of Form 4530-126.

Item 10b Specify the maximum amount of inks or solvent used in gallons per hour and per year. These projections should be consistent with the assumptions used to project the "maximum theoretical emissions" from this emissions unit, that is, reasonable assumptions about the maximum operating level of the emissions unit.

Item 10c Specify the normal usage of inks and solvents in gallons per year.

Items 10d -10f Specify the composition of inks, fountain solutions, etc. in weight or volume percent, as applied. For each ink, fountain solution, etc. specify the weight or volume percent (for flexographic, packaging rotogravure, or publication rotogravure operations) of d) solids, e) VOCs (Volatile Organic Compounds), and f) water, in the appropriate column. Include exempt solvents as water in column h (see Note 1 below).

Item 10g Specify the density of each ink or VOC in pounds per gallon. This information is necessary for the calculation of VOC content at column 10h (see below).

Item 10h For screen printing sources only, specify the VOC content of the ink in pounds per gallon less water (and exempt solvents), as applied. See instructions booklet for examples of this calculation.

Note 1: Exempt solvents are those identified in the definition of VOC as having negligible photochemical reactivity. Methylene chloride and methyl chloroform (1,1,1-trichloroethane) are the two most commonly used exempt solvents in printing operations.

Note 2: The VOC content of the ink and other composition information may be available from your ink supplier.

Please do not forget to complete Form 4530-118, DESCRIPTION OF METHODS USED TO DEMONSTRATE COMPLIANCE.

PAINTING AND COATING OPERATIONS -- Form 4530-108
AIR POLLUTION CONTROL PERMIT APPLICATION INSTRUCTIONS

NOTE: Use of this form is required by the Department for any air pollution control permit application filed pursuant to ss. 285.61, 285.62 or 285.66, Wis. Stats. Completion of this form is mandatory. The Department will not consider or act upon your application unless you complete and submit this application form. It is not the Department's intention to use any personally identifiable information from this form for any other purpose.

Complete one form for each significant painting or coating operation.

Item 1 Provide the name of the facility.

Item 2 Provide the facility identification (FID) number that appears on the annual emission inventory reports..

Item 3 Provide an identification number for the stack exhausting this painting or coating operation (e.g. S10, S20, etc.). The same stack identification number should appear on all appropriate forms used in conjunction with this operation. If there is more than one stack exhausting this unit, please attach Form 4530-135 (Supplemental Information) to further describe the situation. Use the same number used on Form 4530-103.

Item 4 Assign a process number for this painting or coating operation (Process P30, Process P25, etc.). This number will be used as the identification number for this operation. Use the existing identification number from the Air Emissions Inventory. This number should also appear on the other appropriate forms for this painting or coating operation: forms for control system, compliance determination, and stack identification.

Item 4a Provide the manufacturer's name and equipment's model number. Also specify dryer manufacturer and model number. Specify the products and substrate to be coated or painted. In addition, specify the maximum process weight rates for this operation in pounds per hour (maximum process weight is the maximum weight of coating and products per hour).

Item 5 Specify the type of control device used to reduce emissions from this operation. If the operation is uncontrolled, check "uncontrolled". Provide the identification number (e.g., C30, C40) of the control device. The same number should also appear on Form(s) 4530-110, 111, 112, 113, 114, 115, 116, or 117 and all other forms completed for this control device.

Item 6 Specify the application technique for this operation (e.g. spraying, roll coating, etc.). Specify the transfer efficiency for this operation. Transfer efficiency is the portion of coating solids which adheres to the surface being coated during the application process, expressed as a percentage of the total volume or weight of coating solids delivered to the application.

Item 7 Provide the installation date (month/day/year) or date of last modification, whichever is later, for this equipment. Please see instructions booklet for the definition of "modification". Provide the month and date if possible (write in "00" if unknown (e.g., 00/00/56)). Indicate if this is a new source.

Item 8 Specify normal operating schedule in hours per day, days per week, and days per year.

Item 9 Specify the number of ovens, their fuels, and their maximum heat input in million BTU per hour.

Item 10 Include all paints, coatings, and clean-up solvents used in this operation or projected for use in the future under alternative operating scenarios. Please do not forget to complete and attach Form(s) 4530-126, one for each material that emits hazardous air pollutants, for this painting or coating operation. Painting or coating operations that use large numbers of materials that emit hazardous air pollutants may submit a summary of hazardous emissions, as described in the instructions for Item 5 of Form 4530-126.

Item 10a Provide the names or identifying numbers of the paints, coatings, and clean-up solvents.

Item 10b Specify the coating category (i.e., "ct cg" on the form) by writing the appropriate number: (1) air dried, (2) clear, (3) cured, (4) extreme performance, or (5) other. A coating is considered cured if the coated object is heated in excess of 194 ^{o}F. Extreme performance coatings are those designed for harsh exposure to one or more of the following: the weather all the time, temperatures consistently above 203 ^{o}F (95 ^{o}C), detergents, abrasive and scouring agents, solvents, corrosive atmospheres, or similar environmental conditions.

Item 10c Specify the temperature of the coated material as it leaves the oven, in degrees F.

Item 10d Specify the maximum amount of coating or solvent used in gallons per hour and per year. These projections should be consistent with the assumptions used to project the "maximum theoretical emissions" from this emissions unit, that is, reasonable assumptions about the maximum operating level of the unit.

Item 10e Specify the normal usage of coatings and solvents in gallons per year.

Items 10f - 10h Specify the composition of coatings in weight percent, as applied. For each coating, specify the weight or volume percentage of f) solids, g) VOC, and h) water, in the appropriate column. Include exempt solvents as water in column h (see Note 1 below).

Item 10i Specify the density of each coating or VOC in pounds per gallon. This information is necessary for the calculation of VOC content at column 10j (see below).

Item 10j Specify the VOC content of the coating in pounds per gallon less water (and exempt solvents), as applied. See the instructions booklet for examples of this calculation.

Note 1: Exempt solvents are those identified in the definition of VOC as having negligible photochemical reactivity. Methylene chloride and methyl chloroform (1,1,1-trichloroethane) are the two most commonly used exempt solvents in coating operations.

Note 2: The VOC content of the coating and other composition information may be available from your coating supplier.

Please do not forget to complete Form 4530-118, DESCRIPTION OF METHODS USED TO DEMONSTRATE COMPLIANCE.

MISCELLANEOUS PROCESSES -- Form 4530-109
AIR POLLUTION CONTROL PERMIT APPLICATION INSTRUCTIONS

NOTE: Use of this form is required by the Department for any air pollution control permit application filed pursuant to ss. 285.61, 285.62 or 285.66, Wis. Stats. Completion of this form is mandatory. The Department will not consider or act upon your application unless you complete and submit this application form. It is not the Department's intention to use any personally identifiable information from this form for any other purpose.

Complete one form for each significant miscellaneous process.

Item 1 Provide the name of the facility.

Item 2 Provide the facility identification (FID) number that appears on the annual emission inventory reports.

Item 3 Provide the identification number for the stack exhausting this process. Use the same number used on form 4530-103.

Item 4 Assign an identification number to this process (e.g., P21). Use the existing identification number from the Air Emissions Inventory. Use this number on other forms related to this operation.

Item 4a Provide a brief description of this unit. List the manufacturer and model number.

Item 5 If this process is controlled, assign a control device number (e.g., C30) to the air pollution control device associated with it. Use this number on the appropriate form(s) 4530-110 through -117.

Item 6 The Source Classification Code is an eight-digit number used by the EPA to estimate emissions from specific types of industrial processes. This number is listed on the Air Emission Inventory for each individual process and fuel. If you do not know the number, the Department will fill this in.

Item 7 Record the date of installation or last modification of the emissions unit. Provide the month and date if possible. Write in "00" if unknown (e.g., 00/00/56). Indicate if this is a new source.

Item 8 Provide the normal operating schedule.

Item 9 Briefly describe the process, including types of operations involved, end product of the process and use of the product. Attach a flow diagram of the process, identifying major pieces of equipment; pickup points for dusts, fumes and vapors; control and collection devices; exhaust stack and vents; where raw materials enter the process; and where finished products exit. Indicate if the process is batch or continuous. Use form 4530-135 for additional information, and mark the box "attached."

Item 10 List all of the materials put into the process and the average and maximum amounts used (in pounds per hour or tons per hour). This is the process weight rate. List any solvents, additives, cleaners, etc. (in gallons per hour or per year) used with this process. If the process produces more than one product, include a list of the raw materials used to produce each product. Describe any storage and materials handling processes. If the process has no "raw materials" per se, write "NA" or " - " in each field across the first line of item 10.

Item 11 List the types of finished products and the average and maximum amounts produced. Describe any storage and material handling processes. If the process has no "finished products" per se, write "NA" or " - " in each field across the first line of item 11.

Item 12 List all of the fuels that the process uses or is capable of using. Provide the average and maximum amount of fuel used per hour of operation of the process. Provide the maximum heat input capacity for the fuel burner for the process. Provide an analysis of the fuel used, including at a minimum heat content, sulfur content and density. Coal, residual (#5 and #6) oils, sludge, waste oils, refuse derived fuels, etc., will require the submittal of an analysis of hazardous contaminants. Please attach these analyses to this form.

If the process uses no process fuels, write "none" under "type of fuel" and "NA" or " - " in the remaining fields of the first line of item 12.

Item 13 Briefly describe the fugitive sources. Include size of storage piles, material stored, length of roads, and any control measures used. Attach detailed information as appropriate. If you've used this form to describe a source of fugitive emissions, write "see above."